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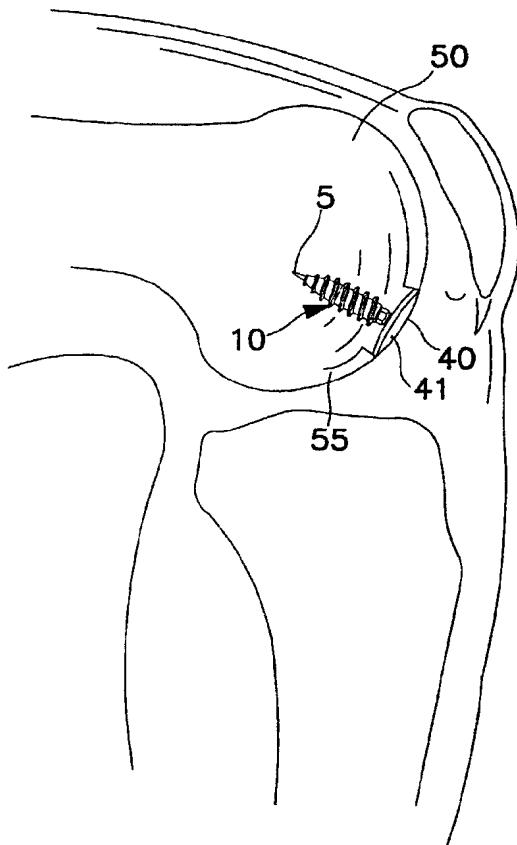
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR JOINT RESURFACE REPAIR



(57) Abstract: The present invention provides tools and methods for mapping and measuring the articular surface of a joint (or of any bony surface) and for fabricating a prosthetic device based on this recorded data. In one embodiment, once the defect of the chondral surface has been identified, a guide pin (20) is inserted arthroscopically. A fixation screw (10) is driven into the sub-chondral bone in relation to a reference axis that is approximately central to the defect, the fixation device also serving to define a tangent point to the surrounding articular surface. A measuring tool (70) having a static post that establishes the axial location of origin is inserted on the reference axis. Data recorded during the mapping procedure is entered into parametric engineering design software of similar algorithm to define a three dimensional surface matched to the bearing surface geometry to be implanted and reproduce the anatomic contours mapped.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/00; A61F 2/46

US CL : 606/102; 623/18.11, 20.14, 20.31, 23.35

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 606/102; 623/18.11, 20.14, 20.31, 23.35, 20.31, 20.28, 20.29, 20.33

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

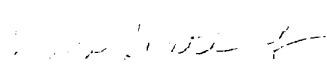
C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,964,808 A (BLAHA et al) 12 October 1999, whole document.	1-10
Y	US 5,888,210 A (Draenert) 30 March 1999, whole document.	1-10
Y	US 5,771,310 A (Vannah) 23 June 1998, whole document.	1-10
A	US 5,824,105 A (Ries et al) 20 October 1998, whole document.	1-10
A	US 5,486,178 A (Hodge) 23 January 1996, whole document.	1-10
A	US 5,540,696 A (Booth, Jr. et al) 30 July 1996, whole document.	1-10

 Further documents are listed in the continuation of Box C. See patent family annex.

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"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,928,286 A (Ashby et al) 27 July 1999, whole document.	3-5